SOLAR'S MOST TRUSTED

REC

REC ALPHA®
PRO M SERIES
DATASHEET



620-640 W_P

HETEROJUNCTION TECHNOLOGY

22.5% MAX. EFFICIENCY

-0.24% /°C TEMP. COEFF. P_{MAX}

92% MIN. POWER IN YEAR 25

PRODUCT · PERFORMANCE · LABOR

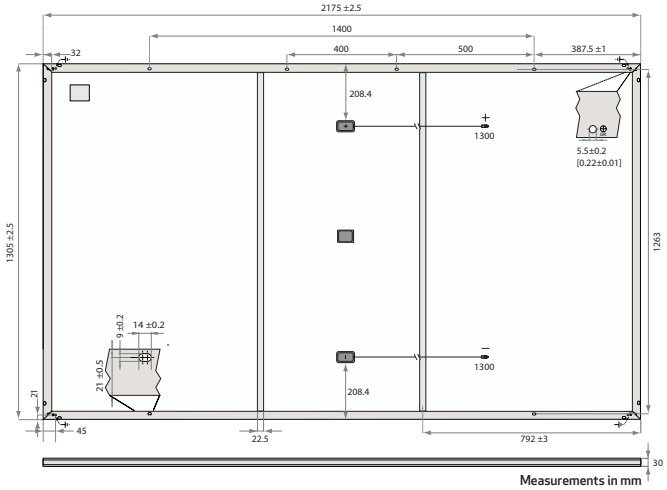
REC 25 YEAR ProTrust WARRANTY

ELIGIBLE

REC ALPHA® PRO M SERIES
DATASHEET

GENERAL DATA

Cell Type	120 half-cut REC bifacial heterojunction cells
Glass	3.2 mm solar glass with anti-reflective surface treatment in accordance with EN12150
Backsheet	Highly resistant polymer (Silver)
Frame	Anodized aluminum (Silver)
Junction Box	3-part, 3 bypass diodes IP68 rated, in accordance with IEC 62790:2020
Connectors	Stäubli PV-KBT4-EVO2 (4 mm²; MC4-EVO2) in accordance with IEC 62852:2014, IP68 only when connected
Cable	4 mm² solar cable, 1.3 m + 1.3 m in accordance with EN50618:2014
Dimensions	2175 x 1305 x 30 mm (2.84 m²)
Weight	32.5 kg
Origin	Made in Singapore



Measurements in mm

ELECTRICAL DATA

PRODUCT CODE*: RECxxxAA Pro M	620	630	640
STC			
Power Output - P_{MAX} (W_p)	620	630	640
Watt Class Sorting - (W)	0/+10	0/+10	0/+10
Nominal Power Voltage - V_{MPP}(V)	36.6	36.8	37.1
Nominal Power Current - I_{MPP}(A)	16.94	17.12	17.26
Open Circuit Voltage - V_{OC} (V)	44.4	44.5	44.6
Short Circuit Current - I_{SC} (A)	17.79	17.86	17.93
Power Density (W/m²)	218	222	225
Panel Efficiency (%)	21.8	22.2	22.5
NMOT			
Power Output - P_{MAX} (W_p)	472	480	487
Nominal Power Voltage - V_{MPP} (V)	34.5	34.7	35.0
Nominal Power Current - I_{MPP} (A)	13.68	13.83	13.94
Open Circuit Voltage - V_{OC} (V)	41.8	41.9	42.0
Short Circuit Current - I_{SC} (A)	14.37	14.43	14.48

Values at standard test conditions (STC: air mass AM 1.5, irradiance 1000 W/m², temperature 25°C), based on a production spread with a tolerance of P_{MAX}, V_{OC} & I_{SC} ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m², temperature 20°C, windspeed 1 m/s). * Where xxx indicates the nominal power class (P_{MAX}) at STC above.

CERTIFICATIONS

IEC 61215:2021; IEC61730:2016; UL61730	
ISO 11925-2	Ignitability (EN 13501-1 Class E)
IEC 62716	Ammonia Resistance (Optional)
IEC 61701	Salt Mist- SM6 (Optional)
IEC 61215:2016	Hailstone (35 mm)

MAXIMUM RATINGS*

Operational Temperature	-40 °C - +85 °C
System Voltage	1500 V
Maximum Test Load (front)	+5400 Pa (550 Kg/m²)
Maximum Test Load (rear)	-2400 Pa (245 Kg/m²)
Max Series Fuse Rating	35 A
Max Reverse Current	35 A

* See installation manual for mounting instructions. Design load = Test load / 1.5 (safety factor)

TEMPERATURE RATINGS*

Nominal Module Operating Temperature	44 °C ± 2°C
Temperature coefficient of P_{MAX}	-0.24% / °C
Temperature coefficient of V_{OC}	-0.24% / °C
Temperature coefficient of I_{SC}	0.04% / °C

*The temperature coefficients stated are linear values

DELIVERY INFORMATION

Panels per Pallet	33
Panels per 40 ft GP/high cube container	528 (16 Pallets)

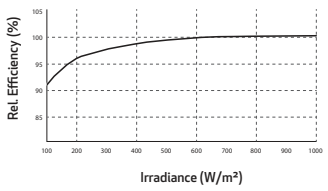
WARRANTY

	Standard	REC ProTrust	
Installed by an REC Certified Professional	No	Yes	Yes
System Size	All	<25 kW	25-500 kW
Product Warranty (yrs)	20	25	25
Power Warranty (yrs)	25	25	25
Labor Warranty (yrs)	0	25	10
Power in Year 1	98%	98%	98%
Annual Degradation	0.25%	0.25%	0.25%
Power in Year 25	92%	92%	92%

REC ProTrust Warranty applies only for i) REC panels installed by an REC Certified Solar Professional, and ii) panels have been registered by the installer with REC. Subject to System Size and further conditions. See www.recgroup.com for details.

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



Available from:

Founded in 1996, REC Group is an international pioneering solar energy company dedicated to empowering consumers with clean, affordable solar power. As Solar's Most Trusted, REC is committed to high quality, innovation, and a low carbon footprint in the solar materials and solar panels it manufactures. Headquartered in Norway with operational headquarters in Singapore, REC also has regional hubs in North America, Europe, and Asia-Pacific.

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Specifications subject to change without notice.

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